

PVC Floating Accent Light

Written By: Larry Cotton



- Combination square (1)
- Drill and drill bits (1)
- File or high-speed rotary tool (1) such as Dremel
- Hot glue gun (1)
- <u>Jigsaw (1)</u>

 <u>for cutting plywood</u>
- Marking compass (1)
- Measuring tape (1)
- Saw (1) for cutting plastic pipe. Handheld saws will work, but we recommend a band saw or a table saw with a miter gauge and a fine-toothed blade.
- Screwdriver (1)

PARTS:

- PVC pipe (1)
- Switch (1)Lowe's #71393
- Plywood (1)
- Threaded nipple (1)

 Lowe's #46816
- Socket (1)Lowe's #70826
- Wire nut (1)
- Lamp cord (1)
- Lamp bulb (1)
- Acrylic rod (1) for the feet. You can also use a tilt wand for Venetian blinds.
- Cyanoacrylate glue (1)
 aka super glue or crazy glue
- Spray paint (1) various colors. If you're using primer, you can use most any paint. To skip the primer, use Krylon Fusion or Rust-

Oleum Paint for Plastic; they're formulated to bond directly to plastic.

- Spray automotive primer (1)
 Rust-Oleum or equivalent
- Automotive body filler putty and/or automotive glaze (1)
 such as Bondo filler or DuPont 315 glaze
- Sandpaper (1)
- Masking tape (1)
- Hot glue and/or epoxy (1)

SUMMARY

By Larry Cotton and Phil Bowie

Humble PVC drain pipe is cheap, widely available, easy to work with, and almost endlessly useful for making everything from patio furniture to elegant sculptures.

This lamp adds a romantic glow to any room. Designed to provide good airflow around the bulb, it seems to float magically on a soft ring of light around its base.

The Floating Accent Lamp is part of a series of four family-friendly projects that use 3"- or 4"-ID (inside diameter) PVC pipe. In a weekend you can easily make all four: an accent lamp that seems to float on light, a <u>two-faced clock</u> to help you remember friends in another time zone, a <u>kids' table</u> with a dry-erase top and matching stool, and a <u>hanging planter</u>.

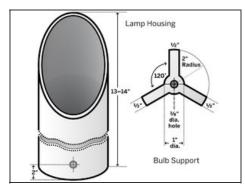
You can make them with handheld tools, but bench tools such as a band saw or table saw with a fine-toothed blade work best for making square and accurate cuts. PVC also bends easily when heated in boiling water, which opens up all kinds of new shapes and design possibilities.

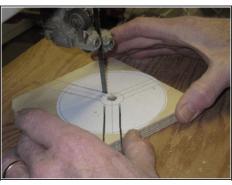
If cutting pipe from a 10' length, ask a friend to help support it. Use a face mask and ear protection for cutting and sanding.

Fill any dings with automotive body filler and/or glaze. Then sand the pipe parts with 180-grit sandpaper, prime, and paint. If you want to skip the primer, there are new spray paints that

adhere directly to plastic.

Step 1 — Make the housing.







- WARNING: PVC pipe tends to roll while cutting on a table saw, so hold it firmly and cut slowly. Gripper gloves help. For cutting off sections on a table saw, set the blade just slightly higher than the pipe wall thickness. Don't use a ruler or tape to set blade height; instead, make trial cuts in a scrap of wood and measure the cuts. Always wear eye protection when using power saws.
- Cut and drill the bulb support from ½" plywood, following the diagram.
- One 45°-angled cut in the 4" PVC easily allows you to make 2 lamp housings if you wish.
 Drill the hole in back to fit your switch, 2" from the pipe bottom. Thoroughly sand the angle and the bottom surfaces.

Step 2 — **Assemble the lamp parts and paint.**



- Thread the nipple through the bulb support, add the socket, and wire up the switch. Ensure that all electrical connections are tight and insulated.
- Screw in a 40W (maximum) frosted or CFL bulb and test.
- Mask the inside of the PVC housing, then sand and paint the outside a bright color.
- Reverse the masking and paint the elliptical rim, the bottom rim, and the inside white.

Step 3 — Install the lamp assembly.



- Mount the switch, and then hot-glue the bulb support assembly into the lamp about 1" from the bottom.
- Important: Make sure the bulb is centered in the pipe.

Step 4 — Glue on the feet.





• Super-glue at least six ¼"-diameter, 1½"-long clear feet inside the bottom rim. We used acrylic rod. Sand the mating surfaces thoroughly before gluing. Notch a scrap of wood and use it as a jig to ensure that the feet protrude the same amount.

For more PVC creations, check out these projects!

PVC Kids' Table and StoolPVC Two-Faced ClockPVC Plant Holder

This project first appeared in **MAKE Volume 30**, page 96.

This document was last generated on 2012-11-01 08:21:59 PM.